



Revised Report to the
Board of County Commissioners

**Implementing Goal 105
and the Recommendations of the
Florida Keys Carrying Capacity Study
THE TIER SYSTEM**

Tier I	Conservation, Restoration, Protection
Tier II	Transition, Reduce Sprawl
Tier III	Redevelopment, Infill Development

Monroe County
Planning and Environmental
Resources Department

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1.0 Purpose

The purpose of this report is as follows:

- To provide the Monroe County Board of County Commissioners and the public with the proposed Tier Maps developed by staff to guide future development and land acquisition.
- To explain how the Tier System, including the Tier Maps, implement Goal 105 “Smart Growth” of the Comprehensive Plan.
- To review the requirements of the Florida Administrative Commission Rule number 28-20.100 – 2010 Comprehensive Plan “Work Program”.
- To provide additional understanding of the results of the Carrying Capacity Study and how the Tier System is the framework for it’s implementation by the County.
- To designate the boundaries of the geographical areas included in each Tier.

2.0 Background

The Florida Keys consists of a 112-mile long chain of islands located at the southern tip of Florida. U.S. Highway 1, stretching from Key Largo to Key West, connects the more developed islands. The biological communities in the Florida Keys have evolved in response to unique island environmental conditions characterized by salt water, subtropical savanna-type climate- hot humid summers and cool dry winters, limestone substrate and hurricanes. These conditions combined with the isolation of the islands have supported colonization and evolution of highly specialized plants and animals, many endemic to the Florida Keys. The upland habitats, hammock and pine lands include over 30 of these endemic species. In addition, a significant portion of the waters adjacent to the islands has been designated as Outstanding Florida Waters, and includes the Florida Keys National Marine Sanctuary.

Approximately 15% of the land area in the Florida Keys is developed, and between 60% and 70% of the undeveloped land area is in public ownership (Florida Keys Carrying Capacity Study, September 2002.) This leaves between 15% and 20% of the land area vacant and in private ownership. This report and the Tier Maps are primarily concerned with this remaining undeveloped privately owned lands and determining, based on the environmental quality and development characteristics, whether they should be designated for acquisition for habitat protection or sprawl reduction, or designated for infill and redevelopment.

2.1 Florida Administration Commission Rule 28-20.100 – Work Program

The 2010 Comprehensive Plan took seven years to be fully in effect, mired in three to four years of legal challenges after it was adopted in April 1993. The ongoing legal proceedings prompted a 1995 Final Order and Recommendations by a Hearing Officer, which found that the proposed Plan was not in compliance and specified remedial action. The findings stated among other things that near shore waters, shoreline sea grasses and Key Deer habitat had reached or exceeded the carrying capacity.



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As a result of this order, the Florida Administration Commission in 1996 enacted Rule 28-20.100, which created the Work Program in the 2010 Comprehensive Plan. The Work Program required among other things, the preparation of a carrying capacity study for the Florida Keys. The goal of the Florida Keys Carrying Capacity Study (FKCCS), excerpted from Rule 28-20.100 reads as follows:

“The carrying capacity analysis shall be designed to determine the ability of the Florida Keys ecosystem and the various segments thereof, to withstand all impacts of additional land development activities.”

Year Six of the Work Program (July 13, 2002 – July 13, 2003) enacted in Rule 28-20.100, as amended, directs the county to implement the Carrying Capacity Study by adopting amendments to the rate of growth ordinance, the LDRs, the future land use maps and maximum permitted densities. The Rule amendment in 2002 added two additional tasks to the work program:

- 1) A master land acquisition plan is required containing a strategy for securing funding and the acquisition of properties that should be preserved due to their habitat and also land for affordable housing; and
- 2) Adoption of land development regulations, and/or comprehensive plan amendments that strengthens the protection of terrestrial habitat through the Permit Allocation System and permitting processes, and the preservation and maintenance of affordable housing stock.

2.2 Carrying Capacity Study

The DCA and the U.S. Army Corps of Engineers jointly sponsored the Carrying Capacity Study. A series of technical workshops were held during 1999 to refine the scope of the study and address uncertainties regarding available information and modeling capabilities. The contractor, URS, Inc., began working on the project in late 1999 and completed the study in September 2002. The draft of the model and study was critically peer reviewed in early 2002.

The National Science Foundation review document stated, that over-all the current peer reviewed scientific information proved insufficient to develop a comprehensive carrying capacity framework that would allow for undisputable determinations of whether future development scenarios fall within the carrying capacity of the Florida Keys. The final report was also peer reviewed and the scientists and technical reviewers agree that the *terrestrial portion* of the study provides a valuable analysis and the Impact Assessment Model is a useful tool, but with substantial limitations. The marine ecosystems and species portion of the study was removed from the model because existing data is insufficient to establish quantitative, predictive relationships between land use or development and marine environment.



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Chapter 5 of the FKCCS (Attachment C) summarizes the results of the study:

The evaluation of the terrestrial ecosystem demonstrated that land development in the Florida Keys has surpassed the capacity of upland habitats to withstand further development.” The study states that fragmentation of the habitat is a primary concern; “Small patches of forest show lower biodiversity, increased vulnerability to invasion by exotic plant and animal species and decreased gene flow within and among populations. The secondary and indirect impacts of development further contribute to habitat loss and fragmentation.” The conclusion is drawn that “the Florida Keys has surpassed the capacity of the upland habitats to withstand further development. Any further development would exacerbate secondary and indirect impacts.

The Carrying Capacity Study concludes with four guidelines for future development:

- 1) Prevent encroachment into native habitat.
- 2) Continue and intensify existing land acquisition programs and land restoration efforts throughout the Keys, wastewater and storm water master plan implementation, and on-going research and management activities.
- 3) Focus on redevelopment and infill development, small potentially acceptable, additional environmental impacts may occur in areas ripe for development and redevelopment.
- 4) Increase efforts to manage the resource to preserve and improve the remaining terrestrial ecosystems.

2.3 Goal 105 Smart Growth

Goal 105 was adopted by the Board of County Commissioners in 2001 to provide a framework within the 2010 Comprehensive Plan to implement the FKCCS and a 20 year land acquisition Program. Goal 105 reads as follows:

Monroe County shall undertake a comprehensive land acquisition program and smart growth initiatives in conjunction with its Livable CommuniKeys Program in a manner that recognizes the finite capacity for new development in the Florida Keys by providing economic and housing opportunities for residents without compromising the biodiversity of the natural environment and the continued ability of the natural and made-made systems to sustain livable communities in the Florida Keys for future generations.

The initial phase of implementing Goal 105 is the drafting and adoption of the Tier maps to be used as guidance for the County’s land acquisition program. Future work tasks include amending the zoning map with a tier overlay, revising the permit allocation system, developing a land acquisition strategy and a land maintenance program.



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The County is directed to implement the 20 year land acquisition program by designating acquisition areas into three general categories: Natural Area (Tier I); Transition (Tier II); and Infill Area (Tier III). Tier III lands will only be acquired for affordable housing and parks. The acquisition program is to be funded with assistance of the state and federal governments and shall accomplish the following:

- Secure for conservation and passive recreation purposes remaining privately-owned environmentally sensitive lands; and
- Retire development rights on privately owned vacant lands to limit further sprawl and to balance the rights of property owners with the sustainability of the Keys man-made and natural systems; and
- Secure and retain land for affordable housing. (Objective 105.2)

The goal includes a description of the lands to be included in each Tier. The descriptions are outlined below:

Tier I – Natural Area

Conservation, restoration and protection of environmentally sensitive land

- Adjacent to existing publicly owned lands and/or high quality habitat.
- Conservation land to qualify for ROGO dedication.
- Consisting of private vacant parcels to be acquired or development rights retired for resource conservation, restoration or passive recreation.
- New development severely restricted in the allocation system.

Tier II – Transition and Sprawl Area

Prevent encroachment on environmentally sensitive land and reduce sprawl.

- Consists of less than 50% built subdivisions or parts of subdivisions with incomplete infrastructure and less than 4 acres of isolated environmentally sensitive land.
- County purchase w/adjacent lot owners – retire development rights and development potential.
- New development discouraged in allocation system.

Tier III – Infill Area

Redevelopment and infill new development.

- Consists of greater than 50% built subdivisions with full infrastructure present or in future plans with established commercial areas.
- Development encouraged in allocation system.
- Newly established community centers become eligible Transfer of Development Rights (TDR) receiver sites with a higher density incentive to TDR.



3.0 Tier Maps

The Tier Maps are based on the requirements and scientific findings from the previously described documents. The maps are being proposed, at this time, as a guide for future land acquisition from willing sellers and designation of Tier I to allow lots to be dedicated for ROGO points. Tier maps have been drafted and are under consideration for all lands in unincorporated Monroe County south of Ocean Reef. The tiers are large areas, with characteristics shared by the majority of the land areas. All tiers include some existing residential and commercial uses, being designated Tier I or Tier II should not have any effect on those existing uses. The tier maps were created using the county's Arc View GIS, which contains most of the maps, aeriels, data, and overlays used in performing the FKCCS.

The Tier Maps will be adopted as an Overlay District to the Land Use District Maps. Specific regulations will be included in the Land Development Regulations (LDRs) to implement the overlay district.

3.1 Criteria for Designation

The Tier boundaries are designated using aerial photography, data from the Florida Keys Carrying Capacity Study, the endangered species maps, property information and field evaluation. The following criteria at a minimum are used to evaluate upland habitats and designate boundaries between different Tier Overlays:

Criteria for designating lands as Tier I:

- Natural area including old and new growth upland native vegetated areas, above 4 acres and a buffer of privately owned vacant lots and parcels.
- Vacant land to connect patches and reduce further fragmentation.
- A buffer, up to 500 feet if indicated, between natural areas and development to reduce secondary impacts; canals or roadways, depending on size may form a boundary.
- Lands designated for acquisition by public agencies.
- Known locations of threatened and endangered species.
- Native Area Land Use district and other districts in buffer/restoration area as appropriate.
- Lands with a potential for successful and management, restoration of disturbed habitat, removal of exotics, and connection of patches.
- Areas with minimal existing development.

Criteria for designating lands as Tier II:

- Subdivisions less than 50% developed, or portions of subdivisions that are less than 50% that are less than 50% developed because of environmental constraints.
- Fragmented, unconnected hammock patches of less than 4 acre, which are isolated from larger natural areas by existing development.



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- Developed and undeveloped SR and SS lots with upland native habitat.
- Platted lots in areas where adjoining property owner(s) may purchase the lots with county participation.

Criteria for designating lands as Tier III:

- Isolated upland habitat fragments of less than half an acre.
- Substantially developed subdivisions near established commercial areas.
- Primarily IS and URM lots.
- Developed non-residential and mixed use areas.

3.2 Methodology

Goal 105 states that overlay maps of the proposed tiers are to be created per Policy 105.2.2 which shall be incorporated as an overlay on the zoning maps with supporting text amendments in the Land Development Regulations and the smart growth initiatives in conjunction with the Livable CommuniKeys Program.

For the first phase of this mapping project, staff was directed to create a specific database tied to the GIS to be used to expand the area available for land acquisition from willing sellers for the Land Acquisition Program. These maps have continued to be refined and will be adopted as zoning overlays to implement the smart growth initiatives and Livable CommuniKeys Program. The maps attribute table provides the following information:

- Property owner
- Property Record card number
- Existing land use designation
- Future land use designation
- Value of property
- Existing Property Appraiser's Code of Actual Use on Property
- Environmental Designation (wetland, hammock, etc.)
- Size of property
- Subdivision identification
- Island name
- Tier Designation

Using the database, GIS shapefiles were created. The shapefiles were used for the creations of Tier maps. While the attribute table provides the information in tabular format regarding the property, the map gives the spatial details; this visual affect allows for fine-tuning of the tier system. The creation of the base map allows for analysis using various computerized overlays, which may be used to aid the planning department or land authority in regard to acquisition, assessment or monitoring. The aide of the maps allowed field inspections and/or prior knowledge to correct any discrepancies in the databases.



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The first priority for land acquisition is to identify areas as Tier I, or natural areas. In order to begin mapping, the attribute table was used to determine the location of the existing natural areas. Locating where the existing sensitive lands lie within the acquisition boundaries of federal and state resource conservation areas and parks were the first step.

Next, the existing Florida Marine Resources Institute (FMRI) ADID habitat maps was used and sensitive lands was highlighted in the legend and an overlay was created from this information. Once the foundation layer showed where the sensitive areas were, the second layer on the map were areas identified by the State in the Florida Forever Program for acquisition lands, or lands within the acquisition boundaries of federal and state resource conservation and park areas. A Tier column was added to the data set and all of these areas received a "Tier I Designation." In addition, small, isolated platted lots with patches of more than four acres of habitat or in close proximity to habitat areas received the Tier I designation in the data set. Buffers were added where vacant lands were available for restoration and to protect the habitat from secondary impacts. All non-developed state and federal public parcels and local parks above four acres were also designated Tier I.

A GIS layer depicting existing infill and subdivision build-out was the primary base for Tier II and III designations. In an effort to determine property to be designated as Tier III, the first attempt was to sort all subdivisions and determine by count how many were 50 percent or more developed. Once determined, the sensitive lands layer was placed over the 50 percent developed subdivisions layer to see if any of these subdivisions might have pockets of sensitive lands. If clusters of hammock existed within the subdivision, either the subdivision was divided into Tier III and Tier II or, the habitat portion of the subdivision was determined a Tier II designation because of the amount of hammock.

For acquisition purposes, if the subdivision is over 50% built out but cannot be further developed due to environmental constraints; remaining lots are designated for acquisition. It should be noted that parcels that house condominiums with large native open space areas were generally given a Tier II designation. Most condominium units require ample open space thus the existing vacant land cannot be built on and these open spaces generally contain clusters of environmentally sensitive lands. This scenario also describes that of mobile home parks where the parcel of land is owned by one entity.

The determination of Tier designation also considered whether the subdivision was near established commercial areas. If the subdivision was built out but had clusters or pockets of sensitive lands; the designation might be broken into two tiers. Acreage that was not platted generally received a Tier II designation as did large parcels of private vacant land. Most of the Suburban Residential (SR) land use district with large lots were given a Tier II designation as only one dwelling unit is permitted per acre and the determination will protect the remaining hammock on these lots.



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Once all parcels received a designation, a vacant parcels layer was created to verify the data set. The Monroe County Property Appraiser's office data was used to determine if the parcel is vacant. In addition, recent ROGO allocations are reviewed.

After the draft Tier Maps were created, the county biologists and planners reviewed the maps, parcel by parcel, to determine the accuracy of the maps and the identification of environmentally sensitive lands. Aerials were used as well as field knowledge and site visits. In addition, corrections are being made to verify water, road easements and to validate the map for acquisition purposes.

The first draft of the Tier Maps were also reviewed and revised in response to comments from U.S. Fish and Wildlife Service, Florida Department of Community Affairs (DCA), Monroe County Land Authority staff and the county Land Steward. Three public meetings were held in locations in the upper and lower Keys in 2003. Comments from the community were taken, concerning possible errors in the data used to draft the maps. These areas were re-evaluated and changes made where appropriate.

3.3 Tier Status

The Board of County Commissioners (BOCC) adopted ordinance number 018-2004 on June 16, 2004, which designates the boundaries of Conservation and Natural Areas (CNA), also known as Tier I. The procedures for a Tier I designation review requires the property owner to submit an application to the Planning and Environmental Resources Department. The application will be considered at a public hearing held before the Special Master. The Special Master will then provide a written opinion to the BOCC recommending approval or denial. The applicant will receive written notification as to when and where the application will be heard by the Special Master. The public hearing will also be advertised at least fifteen days prior to the hearing. Written and/or oral testimony may be given by County staff and the applicant, and there will be reasonable opportunity provided for public testimony. The Special Master will render a written opinion to the BOCC recommending approval (in whole or in part) or denial of the request for a boundary amendment. The BOCC will consider the Special Master's recommendation during the next appropriate public meeting date. The review will be advertised at least 15 days prior to the public hearing, but no posting of the property will be required.

The ordinance also adopts an interim moratorium deferring ROGO and NROGO allocations in areas of two acres or greater containing tropical hardwood hammock or pinelands within any CNA boundary, which will be lifted on June 16, 2005. The moratorium was drafted in response to the determination on December 16, 2003, by the Florida Administration Commission, acting upon the recommendations of DCA, that Monroe County has not made substantial progress toward meeting the objectives of Year 6 of the Work Program. Year 6 of the Work Program directs Monroe County to implement the recommendations in the Florida Keys Carrying Capacity Study (FKCCS) by adopting amendments to the Rate Of Growth



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Ordinance, the Land Development Regulations, the Future Land Use Maps and maximum permitted densities (refer to page 3 of this document).

The purpose of the moratorium is to protect the significant clusters (2 acres and above) of upland habitat that is important to the sustainability of protected species and to the maintenance of ecosystem integrity, as called for by the terrestrial module of the FKCCS and Goal 105 of the 2010 Comprehensive Plan. This was done to protect patches of habitat as small as two acres, and greater, that may be reasonably connected to larger habitat patches through restoration.

The deferment of ROGO and NROGO allocations will afford the Planning and Environmental Resources Department time to amend the 2010 Comprehensive Plan and Land Development Regulations to implement the Work Program, which includes the Tier System. If the County continued issuing ROGO and NROGO allocations within the described moratorium lands, prior to the completion of comprehensive planning to strengthen the protection of terrestrial habitat, the results would be further loss of valuable native habitat through development and clearing of vegetation. The loss of this habitat may have an irreversible detrimental impact on the ecosystem and objectives of the 2010 Comprehensive Plan and Rule 28-20.100.

Big Pine Key and No Name Key are discussed in further detail later in the report, but a moratorium is in effect on these islands until the Habitat Conservation Plan (HCP) application is approved by the U.S. Fish and Wildlife Service and amendments to the County's 2010 Comprehensive Plan and Land Development Regulations, which will implement the Community Master Development Plan.

3.4 Upper Keys, Mile Marker 91 to 112

3.4.1 Description

The boundaries for the Upper Keys Tier region begin at Tavernier Creek Bridge (Mile Marker 91) and extend northward to Mile Marker 112, and excluded from the maps is the Ocean Reef subdivision. The progression from one land use to the next is sharp and is a mixture of commercial, residential and recreational uses. The process used for Tier designation took into consideration the goals and criteria outlined in this Report, as well as the need for gradual transitions between high intensity and low intensity land uses. High intensity uses are characterized by dense commercial and residential developments, while low intensity uses are lands set aside for recreational and conservation purposes.

The four mile stretch between Mile Marker 93 and 97 consists of residential subdivisions and large tracts of publicly owned land. Much of the land along US-1, located on the bay-side, is listed as Tier II because of their environmental sensitivity and the subdivisions' large



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lot Suburban Residential (SR) zoning designation. The density requirement for Suburban Residential (SR) lots is one dwelling unit on two acres of land, which reduces development density and pressures on upland habitat. The Tier II designation will continue to protect the existing vegetation and low density character.

Between Mile Marker 97 and 100, there is a large amount of densely developed subdivisions. These densely developed pockets have a minimal amount of existing habitat and are therefore designated Tier III. Tier III lot designations are in locations where development and environmental conditions are appropriate. These lots are intended to receive the majority of future development because they were already mostly developed and have the appropriate infrastructure to manage additional development; the lots also have little existing habitat.

At Mile Marker 103 and 104, many of the subdivisions are appropriate for infill development and are designated as Tier III. Mile Marker 103 and beyond has development along the US-1 corridor, but beyond the highway quality habitat remains protected and is designated Tier I.

3.4.2 Tier Matrix

The following matrix was built by querying the County's GIS parcel file, whose spatial layer was used to create the Tier maps. The residential and commercial areas were determined using the Monroe County Property Appraiser's database and the property classification codes (PC) associated with each parcel. The matrix presents the amount of vacant, and privately owned vacant, parcels in each Tier. The parcel data is presented in this way so as to provide an estimate of the number of parcels that may have development potential, and those

Location	Tier	Private Vacant URM	Private Vacant IS	Private Vacant SR	Private Vacant Residential Parcels	Private Vacant Commercial Parcels	Total Private Vacant Parcels	Total Developed Parcels
Upper Keys	I	35	462	409	1,336	97	1,433	376
	II	5	1,074	97	1,190	104	1,294	1,623
	III	249	1,220	13	1,636	398	2,034	8,015
Total		289	2,756	519	4,162	599	4,761	10,014

Source: Monroe County Tier Maps and Property Appraiser's Database

that should be acquired from willing sellers for conservation purposes. Also, the Tier Matrix provides information on the number of platted lots in the URM, IS and SR zoning districts.



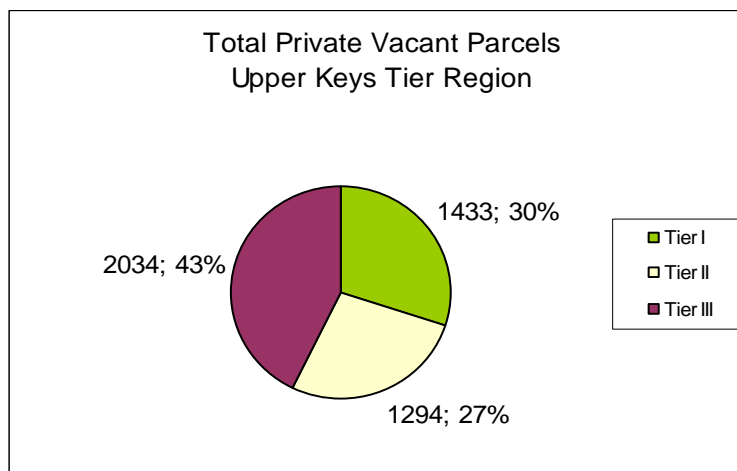
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Vacant parcels having a Tier III designation and a URM or IS district, have a greater residential development potential than those in Tier I or II.

3.4.3 Discussion

The Upper Keys Tier region is 18,210 acres, and there is a total of 565 acres of private, vacant land in Tier II and III. The percentage of land area that is potentially available for development is 3.1%, which includes both residential and commercial parcels designated as Tier II or III. As shown on the previous matrix and the table found in Attachment A, the amount of private vacant parcels and acres is subdivided to differentiate the amount of land dedicated for commercial and residential uses, as well as selected land use districts and Tier designations.

The pie chart below, graphically illustrates the number of privately owned vacant parcels (both residential and commercial) in each Tier for the Upper Keys. Of the total number of privately owned vacant parcels, the largest amount (approximately 43%) is designated as



Tier III. Being that Tier III is most suitable for development infill, the areas containing these parcels will experience increased development as the Rate of Growth Ordinance (ROGO) allocations are distributed.

Within Tier III, there is a total of 2,034 private vacant parcels (both residential and commercial), having a land area of 346 acres. A majority of the Tier III parcels are small lots (less than

an acre in size) that are within the zoning districts URM and IS. The land area of approximately two thousand parcels can add up to only 346 acres because of their small size and large numbers.

Within Tier I, there is a total of 1,433 private vacant parcels, having a land area of 1,756 acres. The land use districts having the greatest amount of land area designated as Tier I are the SR, SS and NA districts (at 1,578 acres) because of their low density requirements and environmental sensitivity. This figure is significant considering that Tier I lands are the highest priority for acquisition. The amount of Tier I lands in public ownership is 13,001 acres, which include federal, state and county lands. The amount of Tier II and III lands in public ownership is 137 acres, and these figures support the County's and State's efforts in preserving only the highest quality habitat and environmentally sensitive lands.



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Of those 1,433 parcels, 201 are within the Florida Forever Program (formerly known as CARL) acquisition areas. The acquisition of parcels by the State's Florida Forever Program will assist in alleviating the County's financial commitment to acquire environmentally sensitive lands that are now designated as Tier I. Also, vacant buildable lots within acquisition areas are permitted to be used as "land dedication" lots in the current ROGO criteria. Once the Tier System is implemented, all Tier I parcels will be permitted as land dedication lots. This will change the number of lots eligible for dedication from 201 to 1,433 private, vacant parcels.

It is important to note that the total number of developed parcels within the Upper Keys region is 10,014 parcels and that the number of developed parcels greatly decreases as you compare Tier III versus Tier II and I. This data is indicative of the accuracy of the designation of existing land within the Upper Keys.

3.5 Middle Keys, Mile Marker 60 to 71

3.5.1 Description

The Middle Keys Tier region is composed of the unincorporated area between Mile Marker 60 (Duck Key) through Mile Marker 71 (Long Key). Prior to the City of Marathon's incorporation, the Middle Keys region began at the Seven Mile Bridge (Mile Marker 47) and extended north to Long Key (Mile Marker 71). The region's mix of land uses include residential neighborhoods, commercial fishing areas, a destination resort, two campgrounds, a state park and natural areas; most of which is primarily located on Duck Key and Long Key. Many of these uses, such as the destination resort Hawks Kay, rely heavily on water resources to continue normal business and residential operations. The City of Layton has been excluded from the Tier maps due to incorporation, however the Long Key State Recreational Area, which surrounds the City is included and is designated as Tier I.

The region's diverse mix of land uses has produced multiple zoning districts within a relatively small stretch of land. The zoning districts found on Long Key include Natural Areas (NA), Improved Subdivisions (IS), Urban Residential Mobile Home (URM) and Suburban Commercial (SC). Duck Key is zoned for a destination resort (DR) and for residential homes (IS). The region's geography and established uses do not allow for a gradual transition between the natural and developed areas. Parcels are designated as either Tier I or Tier III, and there is no land that fits the criteria for a Tier II designation. The Tier III parcels will continue to direct development to Duck Key and portions of Long Key.

3.5.2 Tier Matrix

The following matrix was built by querying the County's GIS parcel file, whose spatial layer was used to create the Tier maps. The residential and commercial areas were determined



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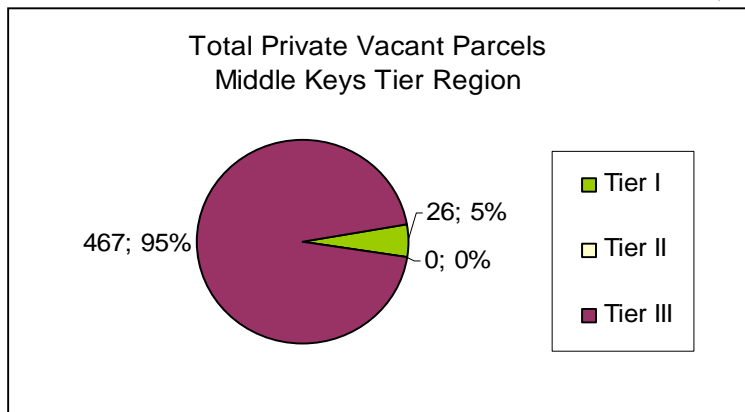
using the Monroe County Property Appraiser's database and the property classification codes (PC) associated with each parcel. The matrix presents the amount of vacant, and privately owned vacant, parcels in each Tier. The parcel data is presented in this way so as to provide an estimate of the number of parcels that may have development potential, and those that should be acquired from willing sellers for conservation purposes. Also, the Tier Matrix provides information on the number of platted lots in the URM, IS and SR zoning districts. Vacant parcels having a Tier III designation and a URM or IS district, have a greater residential development potential than those in Tier I or II.

Location	Tier	Private Vacant URM	Private Vacant IS	Private Vacant SR	Private Vacant Residential Parcels	Private Vacant Commercial Parcels	Total Private Vacant Parcels	Total Developed Parcels
Middle Keys	I	0	0	3	26	0	26	1
	II	0	0	0	0	0	0	0
	III	51	350	5	460	7	467	1,150
Total		51	350	8	486	7	493	1,151

Source: Monroe County Tier Maps and Property Appraiser's Database

3.5.3 Discussion

The Middle Keys Tier region is 1,332 acres, and there is a total of 116 acres (467 parcels) of private, vacant land in Tier II and III. The percentage of land area that is potentially available for development is 8.7%, which includes both residential and commercial parcels designated as Tier II or III. As shown on the previous matrix and the table found in Attachment A, the amount of private, vacant parcels and acres is subdivided to differentiate the amount of land dedicated for commercial and residential uses, as well as selected land use districts and Tier designations.



The following pie chart graphically illustrates the number of privately owned vacant parcels (both residential and commercial) in each Tier for the Middle Keys. Of the total number of privately owned vacant parcels, the largest amount (approximately 95%) is designated as Tier III. Being that



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Tier III is most suitable for development infill, the areas containing these parcels will experience increased development as the Rate of Growth Ordinance (ROGO) allocations are distributed.

Within Tier III, there is a total of 467 private vacant parcels (both residential and commercial), having a land area of 116 acres. A majority of the Tier III parcels are small lots (less than an acre in size) that have high density requirements and are within the zoning districts DR, URM and IS. All of the parcels located on Duck Key and Conch Key are Tier III, and as discussed earlier, because of the region's geography and environmental conditions, there are no lots suitable for Tier II designation.

All Tier I parcels are located on Long Key and are contiguous with Long Key State Recreational Area. There are a total of 26 private, vacant Tier I parcels, having a land area of 124 acres. These figures are important because Tier I lands are a priority for acquisition. The land use districts having the greatest amount of land area (at 140 acres) designated as Tier I are the SR, SS and NA districts because of their low density requirements and environmental sensitivity. The amount of Tier I lands in public ownership is 804 acres, and much of the acreage is attributed to the State Recreational Area. At 9 acres, the amount of Tier II and III lands in public ownership is far less, and these figures support the County's and State's efforts in preserving only the highest quality habitat and environmentally sensitive lands.

Of those 26 Tier I private and vacant parcels, 24 are within the Florida Forever Program (formerly known as CARL) acquisition areas. The acquisition of parcels by the State's Florida Forever Program will assist in alleviating the County's financial commitment to acquire environmentally sensitive lands that are now designated as Tier I. Also, vacant buildable lots within acquisition areas are permitted to be used as "land dedication" lots in the current ROGO criteria. Once the Tier System is implemented, all Tier I parcels will be permitted as land dedication lots. This will change the number of lots eligible for dedication from 24 to 26 private, vacant parcels.

It is important to note that the total number of developed parcels within the Middle Keys region is 1,151 parcels, and of those developed 1,150 are within Tier III. This data is indicative of the accuracy of the designation of existing land within the Upper Keys.

3.6 Lower Keys, Mile Marker 4 to 40

3.6.1 Description

The boundaries for the Lower Keys Tier region is comprised of all of the islands from Mile Marker 4 (Stock Island) to Mile Marker 40 (Little Duck Key). Excluded from the region is Big Pine and No Name Keys, which are described in Section 3.7. The geography of the islands lend themselves well to the strategy of directing future development to infill areas



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(Tier III) and providing a buffer between natural and developed lands. The Lower Keys islands are less linear and extend a relatively far distance from the US-1 corridor. Certain islands have neighborhoods that follow a traditional development pattern. The subdivisions are organized on a grid street network, this is especially true on Stock Island. While the Tier system is designed to reduce and focus development away from habitat, it also promotes the concentration of community activities. This will assist in creating vibrant communities with defined boundaries.

The Lower Keys region includes refuge areas, residential neighborhoods and high-density commercial areas. The high-density commercial areas are primarily located on Stock Island and US 1 corridor, this is especially true for Big Coppitt and Summerland Keys. Boca Chica Naval Air Station and land that is specifically for Military Facilities are excluded from this draft of the Tier System. The Federal Government currently owns the military land and there is no indication that they will change ownership in the near future.

3.6.2 Tier Matrix

The following matrix was built by querying the County's GIS parcel file, whose spatial layer was used to create the Tier maps. The residential and commercial areas were determined using the Monroe County Property Appraiser's database and the property classification codes (PC) associated with each parcel. The matrix presents the amount of vacant, and privately owned vacant, parcels in each Tier. The parcel data is presented in this way so as to provide an estimate of the number of parcels that may have development potential, and those that should be acquired from willing sellers for conservation purposes. Also, the Tier Matrix provides information on the number of platted lots in the URM, IS and SR zoning districts. Vacant parcels having a Tier III designation and a URM or IS district, have a greater residential development potential than those in Tier I or II.

Location	Tier	Private Vacant URM	Private Vacant IS	Private Vacant SR	Private Vacant Residential Parcels	Private Vacant Commercial Parcels	Total Private Vacant Parcels	Total Developed Parcels
Lower Keys	I	6	489	209	2,848	47	2,895	483
MM 4-40	II	2	411	8	551	5	556	474
	III	166	1,230	50	1,745	171	1,916	6,452
Total		174	2130	267	5,144	223	5,367	7,409
Source: Monroe County Tier Maps and Property Appraiser's Database								

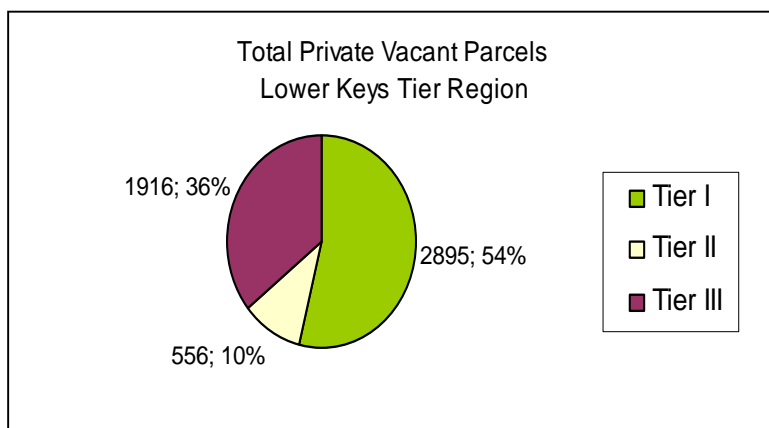


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3.6.3 Discussion

The Lower Keys Tier region (excluding Big Pine and No Name Keys) is 26,898 acres, and there is a total of 697 acres (2,472 parcels) of private, vacant land in Tier II and III. The percentage of land area that is potentially available for development is 2.6%, which includes both residential and commercial parcels designated as Tier II or III. The Lower Keys region is the largest in acres, but has the lowest percentage of potentially developable land in all of the Keys. As shown on the previous matrix and the table found in Attachment A, the amount of private vacant parcels and acres is subdivided to differentiate the amount of land dedicated for commercial and residential uses, as well as selected land use districts and Tier designations.

The pie chart below, graphically illustrates the number of privately owned vacant parcels (both residential and commercial) in each Tier for the Lower Keys. Of the total number of privately owned vacant parcels, the largest amount (approximately 54%) is designated as



Tier I. Tier III is the next largest Tier group with 36% of the parcels. Being that Tier III is most suitable for development infill, the areas containing these parcels will experience increased development as the Rate of Growth Ordinance (ROGO) allocations are distributed.

Within Tier III, there is a total of 1,916 private vacant parcels (both residential and commercial), having a land area of 537 acres. A majority of the Tier III parcels are small lots (less than an acre in size) that are within the zoning districts URM and IS (having 1,396 parcels). The land area of approximately one thousand parcels can add up to only 537 acres because of their small size and large numbers.

Within Tier I, there is a total of 2,895 private vacant parcels, having a land area of 5,404 acres. The land use districts having the greatest amount of land area designated as Tier I are the SR, SS and NA districts (at 4,374 acres) because of their low density requirements and environmental sensitivity. This figure is significant considering that Tier I lands are the highest priority for acquisition. The amount of Tier I lands in public ownership is 17,806 acres, which includes federal, state and county lands. The amount of Tier II and III lands in public ownership is 178 acres, and these figures support the County's and State's efforts in preserving only the highest quality habitat and environmentally sensitive lands.

Of those 2,895 parcels, 1,344 are within the Florida Forever Program (formerly known as



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CARL) acquisition areas. The acquisition of parcels by the State's Florida Forever Program will assist in alleviating the County's financial commitment to acquire environmentally sensitive lands that are now designated as Tier I. Also, vacant buildable lots within acquisition areas are permitted to be used as "land dedication" lots in the current ROGO criteria. Once the Tier System is implemented, all Tier I parcels will be permitted as land dedication lots. This will change the number of lots eligible for dedication from 1,344 to 2,895 private, vacant parcels.

There is a total of 223 private, vacant commercial parcels, and of those 171 parcels are designated as Tier III. With the exception of Stock Island, the majority of the vacant commercial parcels are located on US 1 and are in close proximity to other existing commercial uses.

It is important to note that the total number of developed parcels within the Lower Keys region is 7,409 parcels and that the number of developed parcels greatly decreases as you compare Tier III versus Tier II and I. This data is indicative of the accuracy of the designation of existing land within the Lower Keys.

3.7 Big Pine Key and No Name Key, Mile Marker 33 to 29

3.7.1 Description

While Big Pine and No Name Keys are included in the Lower Keys, they require additional discussion and analysis. The Tier designations on Big Pine and No Name Key were not based on the criteria outlined in section 3.1 of this report, but rather other factors established by the Habitat Conservation Plan. The Habitat Conservation Plan (HCP) is required for a permit from U.S. Fish and Wildlife Service because any additional development on Big Pine will have an impact on the endangered species resulting in a prohibited 'taking' of the species. The HCP outlines what types of development will be permitted on Big Pine and No Name Keys and how the primary and secondary impacts of the new development on the endangered species (primarily the Florida Key Deer and the Lower Keys March Rabbit) will be mitigated.

The Tier designations on Big Pine and No Name Keys were based on a Key Deer Population Viability Analysis (PVA) model, in the HCP, which included different habitat characteristics relevant to the survival of the Key deer population. The factors used in the PVA (and also in determining Tier designations) were: deer corridors, deer density, house density, water barriers, distance from US 1, and habitat patch quality. These six factors were evaluated based on two forms of impact to the Key deer, secondary impacts such as increase in traffic and loss or change of habitat. Deer corridors, areas of high deer density, and areas with quality deer habitat were considered most valuable to the species, while areas with a high house density, water barriers such as canals, and areas close to US 1 were considered to be less valuable to the species.



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The resulting Tier designations were somewhat different from other areas in the county. For example, subdivisions which are more than 50% built-out were not designated as Tier III if they are located in areas of high deer density, high habitat quality and located far from U.S. 1 thus increasing the likelihood of traffic mortality. For instance, Tropical Bay subdivision is more than 50% built, but it is designated Tier II because of its distance from US-1. New homes built within the subdivision will increase the number of trips and distance traveled across the island, through critical Key Deer habitat. Thereby increasing the potential of “Take” of the endangered species.

3.7.2 Tier Matrix

The following matrix was built by querying the GIS attribute table that was used to create the Tier maps. The residential and commercial areas were determined using the Monroe County Property Appraiser’s database and the property classification codes (PC) associated with each parcel. The matrix presents the amount of vacant, and privately owned vacant, land per Tier. The parcel data is presented in this way so as to provide the reader with a rough estimate of parcels that may have development potential, or those that may be acquired from willing sellers for conservation purposes. Also shown in the Tier Matrix, are lots having the zoning districts URM, IS and SR. These parcels were singled out because they are the most appropriate for infill residential development.

Location	Tier	Private Vacant URM	Private Vacant IS	Private Vacant SR	Private Vacant Residential Parcels	Private Vacant Commercial Parcels	Total Private Vacant Parcels	Total Developed Parcels
Big Pine Key &	I	0	744	94	1,960	13	1,973	1,470
No Name Key	II	0	442	0	511	0	511	812
	III	0	219	0	245	19	264	609
Total		0	1,405	94	2,716	32	2,748	2,891

Source: Monroe County Tier Maps and Property Appraiser’s Database

3.7.3 Discussion

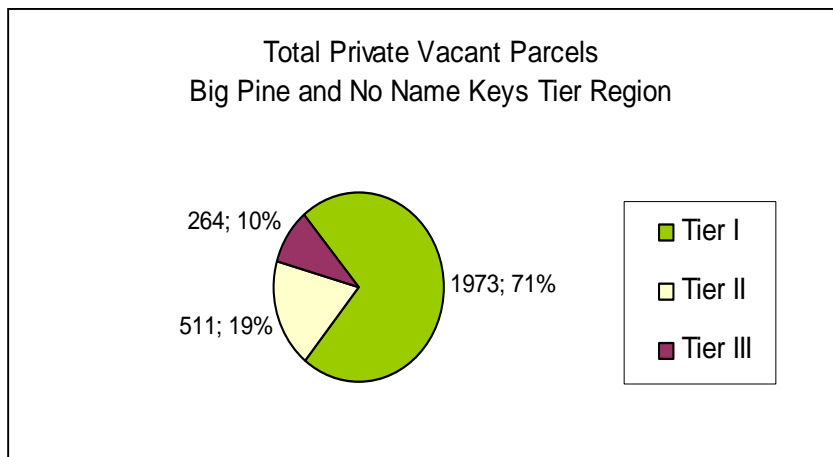
The majority of land on Big Pine and No Name is already under public ownership (roughly 69.3% including federal, state, and county lands). Most of the large tracts have already been purchased for conservation purposes and are under management by the US Fish and Wildlife Service and are part of the Key Deer Refuge and Great White Heron Sanctuary. The HCP



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will require any new development that occurs on Big Pine to be mitigated, mainly through the purchase of lands for conservation purposes. Therefore, the lands currently in private ownership and designated as Tier I, are very important for mitigating the limited amount of proposed new development on Big Pine.

The following graph shows the breakdown of private, vacant parcels by their proposed Tier designations.



The majority of the vacant parcels located in Tier I are either acre parcels located in the center of Big Pine or small Improved Subdivision (IS) lots located in subdivisions which are located in deer corridors or on the north side of the island, far from the US 1 corridor. Tier III parcels are located within close proximity to US 1

and the majority of these parcels are IS lots located on canals. There is a limited amount of vacant commercial lots within the US 1 corridor, which further lends to the protection of Key Deer and the island's rural character. Tier II parcels are predominantly located in subdivisions in the central portion of Big Pine and are on canals or in areas of high housing density. All of No Name Key is designated Tier I for the purposes of protecting Key Deer habitat; the island's current development and environmental conditions meet the over-all criteria for Tier I designation.

The Habitat Conservation Plan will determine the permitted amount of development activities on Big Pine and No Name Key for the next 20 years. The proposed plan will only permit 200 residential units (ten per year) and a corresponding amount of new commercial development. There are a total of 219 vacant IS lots designated as Tier III, however there are 744 IS lots proposed as Tier I. Tier II, the transition area, has 442 vacant IS lots. These figures are important for the reason that Big Pine Key is limited to 10 ROGO allocations per year for the next 20 years.



Attachment A

Vacant Parcels and Development Potential															
Location	Tier	Va- cant URM	Va- cant IS	Va- cant SR	Vacant SR Acres	Vacant SS & NA Acres	Vacant Residen- tial Par- cels	Vacant Com- mercial Parcels¹	Vacant Resi- dential Acres	Vacant Commer- cial Acres¹	Total Private Vacant Acres	Total Pri- vate Va- cant Par- cels	Pub- lic Acres	Total Acres	Total Devel- oped Par- cels
Upper Keys															
	I	35	462	409	336	1242	1336	97	911	845	1756	1433	13001	15203	376
	II	5	1074	97	43	2	1190	104	192	27	219	1294	25	846	1623
	III	249	1220	13	12	10	1636	398	261	85	346	2034	112	2161	8015
Subtotal		289	2756	519	391	1254	4162	599	1364	957	2321	4761	13138	18210	10014
Middle Keys															
	I	0	0	3	30	110	26	0	124	0	124	26	804	942	1
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	51	350	5	2	0	460	7	112	4	116	467	9	390	1150
Subtotal		51	350	8	32	110	486	7	236	4	240	493	813	1332	1151
Big Pine and No Name															
	I	0	744	94	92	657	1960	13	971	5	976	1973	5003	6709	1470
	II	0	442	0	0	2	511	0	92	0	92	511	12	274	812
	III	0	219	0	0	0	245	19	43	13	56	264	32	301	609
Subtotal		0	1405	94	92	659	2716	32	1106	18	1124	2748	5047	7284	2891
Lower Keys (excluding BPK & NNK)															
	I	6	489	209	366	4008	2848	47	5235	169	5404	2895	17806	24199	483
	II	2	411	8	42	39	551	5	156	4	160	556	14	337	474
	III	166	1230	50	23	37	1745	171	330	207	537	1916	164	2362	6452
Subtotal		174	2130	267	431	4084	5144	223	5721	380	6101	5367	17984	26898	7409
Lower Keys Subtotal		174	3535	361	523	4743	7860	255	6827	398	7225	8115	23031	34182	10300
County Total		514	6641	888	946	6107	12508	861	8427	1359	9786	13369	36982	53724	21465

¹ Data calculated based on Property Classification (PC) codes not zoning; Native Area (NA) and Off-shore Island (OS) districts are included.



Attachment B

Natural and Conservation Land Analysis (Tier 1) : Public Lands												
Location		Total	Total Public Owned ³	Total Developed ⁴	Total Private Vacant	Total CAR L	Public CAR L	Private Vacant CARL	Developed CARL	Total Refuge-Land	Private Vacant Refuge Acquisition Land	Remaining Private Vacant Land
Tier I Upper Keys ²												
	Parcels	4119	2,333	376	1,444	1,497	1,194	201	102	322	17	1,226
	Acres	15,203	13,001	344	1,764	3,051	2,810	197	44	7,490	214	1,353
	Value ¹				\$9,460,124							\$7,323,542
Tier I Middle Keys												
	Parcels	56	25	1	26	27	3	24	0	0	0	2
	Acres	943	804	3	124	115	4	111	0	0	0	14
	Value ¹				\$231,773							\$17,268
Tier I Big Pine and No Name												
	Parcels	7,160	3,738	1,470	1,989	5,670	3,141	1,621	931	6,998	1,922	67
	Acres	6,709	5,003	674	990	3,442	2,052	839	503	6,082	835	155
	Value ¹				\$16,642,499							\$1,079,007
Tier I Lower Keys (excluding BPK & NNNK)												
	Parcels	6,173	2,772	483	2,958	2,428	1,036	1,344	48	4,827	2,430	465
	Acres	24,199	17,806	1,075	5,513	5,001	2,530	2,279	192	15,030	2,761	1,645
	Value ¹				\$15,857,258							\$4,617,580
County Total												
	Parcels	17,508	8,868	2,330	6,417	9,622	5,374	3,190	1,081	12,147	4,369	1,760
	Acres	47,054	36,614	2,096	8,391	11,609	7,396	3,426	739	28,602	3,810	3,167
	Value ¹				\$42,191,654							\$13,037,397

¹ Assessed value based on Monroe County Tax Roll.

² Calculation does not include offshore islands.

³ Includes both public conservation property and public developed property.

⁴ Includes both public and private developed property.



Attachment C

Natural and Conservation Land Analysis (Tier 1): Platted Lots							
Location		Total IS and URM	Total Private and Vacant IS and URM	Total CARL IS and URM	Private Vacant CARL IS and URM	Private Vacant and URM Federal Acquisition Land	Remaining Private Vacant IS and URM Land
Tier I Upper Keys	Lots	1,412	497	548	78	0	419
	Acres	314	150	104	16	0	133
	Value ¹		\$2,990,650		\$561,156	\$0	\$2,429,494
Tier I Middle Keys	Lots	0	0	0	0	0	0
	Acres	0	0	0	0	0	0
	Value ¹		\$0		\$0	\$0	\$0
Tier I Big Pine and No Name	Lots	3,205	753	2,246	467	730	18
	Acres	836	136	494	89	117	19
	Value ¹		\$11,585,419		\$6,711,362	\$10,693,789	\$891,380
Tier I Lower Keys (excluding BPK & NNK)	Lots	1,029	495	235	41	367	128
	Acres	377	182	29	5	99	82
	Value ¹		\$4,778,297		\$265,200	\$3,814,568	\$963,729
County Total							
	Lots	5,646	1,745	3,029	586	1,097	565
	Acres	1,527	468	627	110	216	234
	Value ¹		\$19,354,366		\$7,537,718	\$14,508,357.00	\$4,284,603

¹ Assessed value based on Monroe County Tax Roll.



From the Monroe County Year 2010 Comprehensive Plan

WORK PROGRAM

YEAR ONE (ending December 31, 1997)

- A. Complete Phase I (data collection) for the Wastewater and Stormwater Master Plans, and secure funding for plan completion. (Reference County Objective. 901.4)
Agencies; County, DCA DEP, HRS and SFWMD.
- B. Complete a conceptual plan or scope of work to develop a carrying capacity. The carrying capacity analysis shall be designed to determine the ability of the Florida Keys ecosystem, and the various segments thereof, to withstand all impacts of additional land development activities. The analysis shall be based upon the findings adopted by the Administration Commission on December 12, 1995, or more recent data that may become available in the course of the study, and shall be based upon benchmark of, and all adverse impacts to the Keys land and water natural systems, in addition to the impact of nutrients on marine resources. The carrying capacity analysis shall consider aesthetic, socioeconomic (including sustainable tourism), quality of life and community character issues, including the concentration of population, the amount of open space, diversity of habitats, and species richness. The analysis shall reflect the interconnected nature of the Florida Keys' natural systems, but may consider and analyze the carrying capacity of specific islands or groups of islands and specific ecosystems of habitats, including distinct parts of the Keys' marine system. (Ref. 1991 Stip. Settlement Agreement)
Agencies: County, DCA, DEP, HRS, DOT, GFC, SFWMD, NMS, SFRPC, EPA, USFW, Army COE, and other interested parties to include representatives of environmental organizations and development interests.
- C. Complete AWT/OSDS demonstration study and initiate rulemaking for new standards for OSDS (Reference County Policy 901.4.3).
Agencies: HRS.
- D. Complete Marathon Facilities Plan and secure funding for the facility site(s). The wastewater facilities plan should implement the most cost effective method of collecting, treating, and disposing of wastewater and shall include an investigation of the feasibility of using alternative nutrient-stripping on-site disposal systems. The development of the facilities plan shall be a component of the wastewater Master Plan as that Plan is developed.
Agencies: County, DCA, and DEP.
- E. Continue cesspit elimination program with identification of Hot Spots as first priority in accordance with Objective 901.2 and seek funding for cesspit identification. Enter into an interlocal agreement with HRS to specify the responsibilities and procedures for the OSDS inspection/compliance program as required by Policy 901.2.3. Adopt an ordinance which specifies the implementation procedures for the OSDS inspection/compliance program. The ordinance shall include authorization for HRS to inspect wastewater treatment systems on private property as required by Policy 901.2.3. (Reference County Objective 901.2).
Agencies: County, DCA, and HRS.
- F. Submit status of CARL and ROGO land acquisition to the Administration Commission.
Agencies: County, Land Authority, and DEP.
- G. Revise the habitat Evaluation Index (HEI) based on peer review.
Agencies: County, DCA, DEP, FGFWFC, and Federal agencies.

YEAR TWO (ending December 31, 1998)

- A. Complete the wastewater and Stormwater Master Plans and execute interagency agreements to define construction schedule by phases. Document that significant reduction in nutrients will be achieved each year thereafter within each sub-areas. The Master Plans shall include facility plans for all proposed treatment strategies, and determine retrofit and funding requirements for HOT Spots and cesspit identified in D below.
Agencies: County, DCA, DEP, and HRS.
- B. Secure funding for the carrying capacity study and initiate Phase I (data collection) of the study.
Agencies: County, DCA, and DEP.
- C. Complete cesspit ID process in Hot Spots, excluding the Marathon area.
Agencies: County, DCA, and HRS.
- D. Submit status of CARL and ROGO land acquisition to the Administration Commission.
Agencies County, Land Authority, and DEP.
- E. Document the extent and quality of the fresh groundwater lens system on Big Pine Key; delineate the associated recharge areas; and determine the safe yield of the system. (Reference County Policy 103.1.5).
Agencies: County, DCA, SFWMD, USFWS

YEAR THREE (January 1, 1999 through July 12, 2000)

- A. Complete and begin implementation of Wastewater Master Plan. Utilizing the findings of the Wastewater Master Plan and recommendations of the Water Quality Steering Committee relating to Hot Spots do the following: refine and prioritize areas identified as Hot Spots, determine retrofit and funding requirements for priority Hot Spots and cesspit replacement for areas outside those areas identified for central or cluster wastewater collection systems, and begin developing facility plans for priority Hot Spots. Execute interagency agreements to define facility plan, design and construction schedules for each Hot Spot facility. Establish a water quality monitoring program to document the reduction in nutrients as a result of these facilities. Complete a wastewater treatment finance plan and a service area implementation plan, and continue efforts to secure funding for Wastewater Master Plan implementation, with priority given to Hot Spots. Determine the feasibility and legal ramifications of establishing an escrow account as a means of providing long-term funding for replacing cesspits or substandard onsite sewage systems. Establish a mechanism such as special assessments, impact fees, infrastructure surcharge, or other dedicated revenues, to fund the local share of wastewater improvements in Years Four and Five. Seek to provide comparable subsidies for both wastewater collection systems and individual cesspit replacement.
Agencies: County, FCAA, DCA, DEP, DOH, SFWMD, EPA and Water Quality Protection Program Steering Committee (WQSC).
- B. Secure funding for Storm Water Master Plan development, contract selected firm for development of Master Plan, and complete Phase I (data collection). Determine the feasibility of providing nutrient reduction credits for stormwater improvements.
Agencies: County, DCA, DOT, SFWMD, EPA and WQSC.
- C. Conclude acquisition of North Key Largo Hammocks CARL project. Make offers to 33% of remaining private owners with property located in other CARL project boundaries.
Agencies: County, Land Authority and DEP.
- D. Secure remaining funds for the carrying capacity study, conduct workshops as outlined in the Scope of Work, select prime contractor, and initiate Phase I (data collection) of the study.
Agencies: County, DCA, DEP, DOH, DOT, FFWCC, SFWMD, WQSC, SFRPC, EPA, USFWS, Army COE, and other interested parties to include representatives of environmental organizations and development interests.

- E. Continue efforts to secure funding for the Marathon Facility. Complete Little Venice construction design, secure lands needed for Little Venice facility, and begin bid process and selection of construction firm. Design a water quality monitoring program to document Little Venice project impacts.
Agencies: County, FCAA, DCA, DEP, WQSC, and EPA.
- F. Continue cesspit identification by providing notice to all property owners with unknown systems, outside of Hot Spots. Initiate replacement of cesspits outside of Hot Spots. Award financial assistance grants to qualified applicants using FY 1997-98 state funds to ensure a minimum of 70 cesspit replacements. Develop a low interest loan and grant program to assist all residents in replacing cesspits, with priority of funds going, in order of preference, to very low-, low- and moderate-income households. Investigate the appropriate point at which nutrient reduction credits can be awarded for future committed water quality treatment facilities and the appropriateness of transferring credits among ROGO areas.
Agencies: County, DCA, FCAA, WQSC and DOH.
- G. Document the extent and quality of the fresh groundwater lens system on Big Pine Key; delineate the associated recharge areas; and determine the safe yield of the system. (Ref. County pol. 103.1.5)
Agencies: County, FCAA, DEP, DCA, SFWMD, EPA, WQSC and USFWS.
- H. Develop an integrated funding plan for the purchase of land from ROGO applicants who have competed unsuccessfully for four consecutive years and applied for administrative relief.
Agencies: County.
- I. The County, in conjunction with DCA, shall assess the feasibility of applying the nutrient reduction credit requirement to new commercial development.
Agencies: County and DCA.

YEAR FOUR (July 13, 2000 through July 12, 2001)

- A. Continue implementation of Wastewater Master Plan, execute interagency agreements to define construction schedule by phases, and continue developing facility plans for priority Hot Spots in each ROGO area. Secure funding to implement the Wastewater Master Plan. Document that reduction in nutrients has been achieved within each of the sub-areas.
Agencies: County, FCAA, DCA, DEP, DOH, EPA and WQSC.
- B. Complete Storm Water Master Plan. Identify priority projects for implementation and seek funding for plan implementation.
Agencies: County, DCA, DEP, DOT, SFWMD, EPA and WQSC.
- C. Make offers to 50% of remaining private owners with property located in CARL project boundaries.
Agencies: County, Land Authority and DEP.
- D. Complete Phase II of the carrying capacity study (data analysis) and present initial recommendations to review agencies.
Agencies: County, DCA, DEP, DOH, DOT, FFWCC, SFWMD, WQSC, SFRPC, EPA, USFWS, Army COE, and other interested parties to include representatives of environmental organizations and development interests.
- E. Establish baseline water quality for surface and groundwater quality potentially impacted by Little Venice project.
Agencies: County, DCA, DEP, FCAA, WQSC and EPA.
- F. Complete cesspit identification and continue cesspit replacement outside of Hot Spots, with a priority of funds going, in order of preference, to low- and moderate income households; ensure that a minimum of 88 cesspits are replaced
Agencies: County, FCAA, WQSC and DOH.

YEAR FIVE (July 13, 2001 through July 12, 2002)

- A. Continue implementation of the Wastewater Master Plan pursuant to executed interagency agreements. Begin construction of wastewater facilities in selected Hot Spots.
Agencies: County, FCAA, DCA, DOH, DEP, EPA, and WQSC.
- B. Execute interagency agreements to define construction schedule for selected storm water improvement projects. Complete land acquisition and final design for selected treatment strategies for Storm Water Master Plan.
Agencies: County, DCA, DEP, DOT, WQSC and SFWMD.
- C. Conclude negotiations with all willing owners with property within CARL project boundaries. Acquire a total-to-date of 45% of the Key Deer/Coupon Bight project and 25% of the Florida Keys Ecosystems project from willing sellers.
Agencies: County, Land Authority, and DEP.
- D. Complete final draft of the carrying capacity study including acceptance by review agencies.
Agencies: County, FCAA, DCA, DEP, DOH, DOT, FFWCC, SFWMD, WQSC, SFRPC, EPA, USFWS, Army COE, and other interested parties to include representatives of environmental organizations and development interests.
- E. Continue eliminating cesspits and inoperative septic tanks in areas outside of Hot Spots.
Agencies: County, DOH, FCAA and WQSC.

YEAR SIX (July 13, 2002 through July 12, 2003)

- A. Continue construction of wastewater facilities in Hot Spots begun in previous year. Contract to design and construct additional wastewater treatment facilities in Hot Spots in accordance with the schedule of the Wastewater Master Plan. Continue implementation of Wastewater Master Plan with emphasis on Hot Spots.
Agencies: County, FCAA, DEP, DOW, DCA, EPA and WQSC.
- B. Initiate construction of selected projects as identified in the Storm Water Master Plan.
Agencies: County, SFWMD, DEP, DCA, DOT, EPA and WQSC.
- C. Implement the carrying capacity study by, among other things, the adoption of all necessary plan amendments to establish a rate of growth and a set of development standards that ensure that any and all new development does not exceed the capacity of the county's environment and marine system to accommodate additional impacts. Plan amendments will include a review of the County's Future Land Use Map series and changes to the map series and the "as of right" and "maximum" densities authorized for the plan's future land use categories based upon the natural character of the land and natural resources that would be impacted by the currently authorized land uses, densities and intensities.
Agencies: County, FCAA, FFWCC, DCA, DEP, DOH, DOT, SFWMD, SFRPC, EPA, Army COE, WQSC, and USFWS, and other interested parties to include representatives of environmental organizations and development interests.
- D. Complete the elimination of all cesspits in areas outside of Hot Spots. Agencies: County, FCAA, DOH and WQSC.
- E. Develop a Keys-wide master land acquisition plan which shall include:
 - (1) A strategy for the acquisition of those properties which should be preserved due their habitat value as well as those other properties where future development is to be discouraged.
 - (2) A management plan for implementing the strategy, and
 - (3) A reasonable, feasible plan for securing funding for said land acquisition.Agencies : County, Land Authority, DCA, DEP, SFWMD, Army COE, EPA, USFWS, and other interested parties to include representatives of environmental organizations and development interests.

- F. Initiate and complete a collaborative process for the adoption of land development regulations, and/or comprehensive plan amendments as needed, that will strengthen the protection of terrestrial habitat through processes such as the Permit Allocation System and permitting processes, and the preservation and maintenance of affordable housing stock.

Agencies: County, DCA, DEP, FFWC, USFWS, and other interested parties to include representatives of environmental organizations and development interests.

YEAR SEVEN (July 13, 2003 through July 12, 2004)

- A. Finalize construction and begin operating wastewater facilities in Hot Spots. Continue implementation of Wastewater Master Plan with continued emphasis on Hot Spots.

Agencies: County, FCAA, DEP, DCA, DOH, EPA and WQSC

- B. Continue implementing selected projects as identified in the Storm Water Master Plan.

Agencies: County, DCA, DEP, DOT, SFWMD, EPA and WQSC



From the Monroe County Year 2010 Comprehensive Plan

GOAL 105

Monroe County shall undertake a comprehensive land acquisition program and smart growth initiatives in conjunction with its Livable CommuniKeys Program in a manner that recognizes the finite capacity for new development in the Florida Keys by providing economic and housing opportunities for residents without compromising the biodiversity of the natural environment and the continued ability of the natural and made-made systems to sustain livable communities in the Florida Keys for future generations.

Objective 105.1

Monroe County shall implement smart growth initiatives in conjunction with its Livable CommuniKeys and Land Acquisition Programs which promote innovative and flexible development processes to preserve the natural environment, maintain and enhance the community character and quality of life, redevelop blighted commercial and residential areas, remove barriers to design concepts, reduce sprawl, and direct future growth to appropriate in-fill areas.

Policy 105.1.1

Monroe County shall create an economic development framework for a sustainable visitor-based economy, not dependent on growth in the absolute numbers of tourists, that respects the unique character and outdoor recreational opportunities available in the Florida Keys.

Policy 105.1.2

Monroe County shall prepare design guidelines to ensure that future uses and development are compatible with scenic preservation and maintenance of the character of the casual island village atmosphere of the Florida Keys.

Policy 105.1.3

Monroe County shall prepare development standards and amend the Land Development Regulations to limit non-residential allocations for new floor space on any one site to foster the retention and redevelopment of small businesses on the US # 1.

Policy 105.1.4

Monroe County shall prepare redevelopment standards and amend the Land Development Regulations to address the large number of non-conforming commercial structures that are non-compliant as to on-site parking, construction and shoreline setbacks, storm-water management, landscaping and buffers. By identifying the existing character and constraints of the different island communities, regulations can be adopted that provide incentives for redevelopment and permit the continuance of businesses while moving towards an integrated streetscape.